

## Claims

1. A regulator unit, in particular for varying an exciter current, preferably for  
5 generators of motor vehicles, having a housing (13), in which the housing (13) has  
a wiper contact mounting region (16) with a guide (19) and wiper contacts (22)  
seated therein, having a regulator housing portion (25), in which an electronic  
controller unit and a regulator heat sink (28) are received, having a plug element  
10 (31) for electrically connecting the regulator unit (10) to external contact elements,  
and in which the regulator unit (10) has a first through opening (34) and a second  
through opening (37), by means of which openings the regulator unit (10) can be  
fastened to a housing (40) by means of two bolt elements (34), characterized in  
that the regulator heat sink (28) is located between the wiper contact mounting  
region (16) and the plug element (31).

15 2. The regulator unit in accordance with claim 1, characterized in that the wiper  
contact mounting region (16) is located asymmetrically between the first through  
opening (34) and the second through opening (37).

20 3. The regulator unit in accordance with claim 1 or 2, characterized in that the  
guide (19) of the wiper contact mounting region (16) has a center line (43), whose  
shortest spacing from the first through opening (34) is at maximum 20 mm.

25 4. The regulator unit in accordance with one of claims 1 through 3,  
characterized in that the guide (19) of the wiper contact mounting region (16) has  
a center line (43) which is oriented in a direction of motion of the wiper contacts  
(22), and the first through opening (34) has an angular spacing  $\underline{a}$  from the center  
line (43), and the second through opening (37) has an angular spacing  $\underline{b}$  from the  
center line (43), and the ratio between  $\underline{b}$  and  $\underline{a}$  is between 5.2 and 6.0, preferably  
30 between 5.4 and 5.6.

5. The regulator unit in accordance with one of claims 1 through 4,  
characterized in that between the second through opening (37) and the wiper  
contact mounting region (16), there is a further fastening point (46), whose spacing

from the second through opening (37) is between 11 mm and 36 mm.

5 6. The regulator unit in accordance with claim 5, characterized in that the second through opening (37) and the further fastening point (46) each have one bearing face (49) for a mounting element (52), and the bearing faces (49) are located at different levels in the axial direction of the through opening, preferably being spaced apart in this direction by up to 5 mm.

10 7. The regulator unit in accordance with one of the foregoing claims, characterized in that the wiper contact mounting region (16) and the plug element (31) are located between the first through opening (34) and the second through opening (37).

15 8. The regulator unit in accordance with one of the foregoing claims, characterized in that the wiper contact mounting region (16) with its guide (19), the regulator housing portion (25), and the plug element (31) are integrally with one another a single housing part.

20 9. A generator for motor vehicles, having a housing (40) and a regulator unit (10) in accordance with one of the foregoing claims, characterized in that the regulator unit is fastened by means of two bolt elements to a rectifier heat sink and to a connection plate.

25 10. The generator in accordance with claim 9, characterized in that the generator has an axis of rotation (55), from which the first through opening (34) has a spacing R1 and the second through opening (37) has a spacing R2, and R1 is greater by between 5% and 10%.

30 11. The generator in accordance with claim 10, characterized in that one fastening point (58) serves the purpose of contacting and fastening to a connection plate and is located between the first through opening (34) and the axis of rotation (55).

12. The generator in accordance with claim 11, characterized in that the

fastening point (58) is located in a corridor between the first through opening (34) and the axis of rotation (55), and the corridor amounts to between +3 mm and -3 mm with respect to a connecting line between the first through opening (34) and the axis of rotation (55).

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13. The generator in accordance with one of claims 9 through 12, characterized in that the regulator housing portion (25) has a spacing from the end plate (40) in the direction of the axis of rotation of between 0.5 and 5 mm, and preferably between 1.8 and 3.2.

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14. The generator in accordance with one of claims 9 through 13, characterized in that the regulator unit (10) is fastened to the housing (40) by means of the two bolt elements in such a way that it is prestressed by means of bearing points.